

Morris Thin
Logging Feasibility Report

North Fork Siuslaw Watershed

Central Coast Ranger District

Siuslaw National Forest

Prepared By: Casey Hawes

April 16, 2012

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Summary

Morris Thin is comprised of 11 units. Current trees per acre range between about 180 and 300 (TPA); based on stand-exam data. After thinning the units will have areas consisting of 50 to 75 TPA. Stand exam information was used for estimated volumes. The total sale acreage is estimated at 392; total volume is estimated at 5,300 MBF or 10,192 CCF. The project area is located in Sec. 7, 8, 17, 18, 20, 29, 31, 32, 33, T. 17 S., R. 11 W. and Sec. 6, T. 18 S., R. 11 W.; Lane County, Oregon.

Douglas-fir is the dominant species in all the units. As much as is feasible, hardwoods will not be felled in the units. No Pacific yew was observed during stand exams and logging systems analyses; if any Pacific yew is found during operations, none will be felled. Minimum DBH for trees to be harvested is 7 inches. Trees less than 7 inches will be protected where practical.

GIS was used to calculate the length for most roads and the acres for the units. A string box was used to determine the length for temporary roads (see Table 1.).

System roads 5842, 5842777, 5842784, 5842820, 5842821, and 5842822 will generally require roadside brushing, grading, and additional rock. In addition to the maintenance listed above system road 5842820 will also require road clearing.

Table 1. Estimated quantities for landings, tailtrees, intermediate supports and deadman anchors

*G = guyline anchor; T = tailhold anchor (cat tractor on existing landing is recommended)

Unit	Temporary Road Reopening (Feet)	New Temporary Road Building (Feet)	Number of Landings	Number of Tailtrees	Number of Intermediate Supports	Number of Special Anchors (G/T)*
1	2,447	0	9	30	11	none
2	295	0	8	25	10	D 2, G
3	615	0	6	24	0	none
4	0	345	7	18	0	none
5	210	0	5	12	5	Eq 1, G
6	810	0	8	10	4	none
7	4,635	145	15	10	7	none
8	0	0	7	13	2	none
9	0	0	4	7	0	none
10	457	0	3	7	3	none
11	80	0	7	10	3	none
Total	9,549	490	79	166	45	Eq 1,G/D 2,G

Resource Management Objectives

The stand prescriptions, unit layout, and logging and transportation plans will be designed to meet the following resource objectives:

- Speed the development of late-successional forest characteristics in managed stands by thinning these heavily stocked stands to maintain stand health, promote tree growth, and enhance stand diversity.
- Manage riparian reserves consistent with the Northwest Forest Plan's Aquatic Conservation Strategy.
- Protect water quality and fish habitat in all streams.
- Minimize soil disturbance during all phases of harvest activity.
- Protect T&E wildlife species by limiting operating seasons.

Timber Characteristics

Refer to the cruise data for information about timber characteristics.

Recommended Logging Systems

A. Logging System Requirements

The following requirements are designed to meet the resource management objectives stated in section I.

- Except during lateral yarding, the skyline must be capable of keeping the leading end of logs suspended above the ground during inhaul.
- Where yarding occurs across streams, the skyline system must be capable of keeping the entire length of logs fully suspended above streams during inhaul.
- Where the skyline passes through stream buffers, skyline corridors will be spaced so that no more than 20% of the existing canopy in the buffers will be removed in a given 1,000 foot reach of stream.
- Minimum skyline corridor spacing shall be 120 feet and maximum corridor width shall not exceed twelve (12) feet.
- Ground-based yarding shall be limited to slopes of 30 percent or less and use designated skid trails. All designated skid trails must be approved by the sale administrator.

B. Acceptable Yarding Equipment

The skyline system should be capable of transporting logs for a horizontal distance of up to 1,500 feet. A rigging length of up to 2,300 feet will be necessary to reach tailholds.

The skyline system must: (1), be capable of meeting the log suspension requirements stated above; (2), be capable of lateral yarding; and (3), be capable of being rigged in a multi-span configuration (units 1, 2, 5, 6, 7, 8, 10 and 11).

The carriage must be capable of maintaining a fixed position on the skyline, while lateral yarding up to 100 feet on either side of the skyline, and it must be capable of passing support jacks where intermediate supports are used.

Ground-based equipment must be able to provide suspension of the leading end of logs during skidding (units 1, 3 and 8).

C. Logging System Specifications

Table 3 shows the specifications of the logging systems that were used in the analysis for this project. These systems are recommended because they are available, capable of meeting the resource management objectives and logging system requirements, reduce the number of intermediate supports needed, and are capable of doing the job economically.

Table 3. Recommended logging system specifications

Yarder	Madill 6150, SPCM
Tower height	50 feet
Skyline diameter/length/type	0.875 inches/2,000 feet/Swaged
Mainline diameter/length/type	0.625 inches/2,300 feet/Swaged
Haulback diameter/length/type	0.5 inches/4,300 feet/Swaged
Strawline diameter/length/type	N/A
Carriage	Eagle Eaglet; 1,200 pounds

Other equipment—Hardware for rigging tailtrees (2 sets) and intermediate supports (3 sets); crawler tractor for landing clearing; equipment for a guyline and tailhold anchors; a Yoader or Modified Loader; ground-based equipment for yarding logs on designated slopes of 30 percent or less; and a loader/shovel.

Logging Plan Narrative

This section discusses the logging and transportation plans for each unit (See Unit Summary Sheets).

A. General Information

- All unit boundaries are marked with blue-paper or aluminum tags and yellow ribbon.
- All landings are marked with aluminum tags, and solid blue and solid white ribbon.
- Minor clearing is required for some landings.
- Landings are located to minimize yarding over buffered streams and headwalls.

- All roads and landings will be reviewed on the ground by a District hydrologist and the Forest transportation planner for the timber-sale appraisal and contract.
- Log hauling will be limited to the **dry season on 5842820 and most temporary roads** because of the cost associated with the quantity of rock needed.
- There are a few streams and associated headwalls that exist within the units. These areas will be buffered and excluded from the units. Buffer boundaries will be marked on the ground to protect slope stability and water quality. Full-log suspension is required over streams and headwalls.
- Skyline landings generally use fan-shape and parallel settings, with most turnroads using single-span configurations. Tailholding on opposing slopes is emphasized, where opportunities exist, to reduce the need for tailtrees and intermediate supports.
- Where yarding will occur over streams, some areas may lack the deflection necessary to obtain full suspension of logs during whole-tree yarding; therefore, shorter log lengths will be required over these areas.
- Most of the units will require some loader/shovel logging along the roadway or on designated skid trails.

Skyline Profile Data and Payload Analyses (see Appendix A)

Profile and skyline payload analyses were conducted with SkylineXL_2. Adequate tree sizes are available for tailtrees and intermediate supports, using a rigging height of up to 40 feet (most profile analyses figured tailtrees and intermediate supports at a height of 30 feet), and a skyline diameters of 0.75 or 0.875 inches. Adequate payloads equate to three average logs or two long logs (whole-tree length, measured from the stump cut to a 5" top).

Equipment Access and Haul Route

The sale location and probable equipment access and haul routes are displayed on the vicinity map in the timber sale contract. No access or haul route problems are anticipated. The forest transportation planner has verified the following haul routes.

Log haul for unit all units is planned to south on the 5842 to the North Fork Siuslaw County road.

Appendix A

SkylineXL and Profile Data

Appendix B

Appraiser Information

Watershed— North Fork Siuslaw Watershed

Environmental Assessment- The North Fork Siuslaw Landscape Management Project EA (May 2012) covers the sale area.

Survey monuments—see unit summary sheets and logging map.

Dump sites— none

Appendix C

Logging Plan GIS

Morris Thin Unit Summary Sheet

Central Coast Ranger District

General Information

Unit # : 1 **Stand # :** 507246
Legal Location: Sec. 7 and 8, T. 17 S., R. 11 W., W.M. **Acres:** 1979
Photo Number: 18-189 (1995) **Year of Origin:** 1979
Unit Designation: DxP **Residual TPA Post Harvest:** 75
Recon by/Date: Casey Hawes

Volume Information

Source of volume estimate: Stand Exam **Estimated Volume:** 9 MBF/Acre

Special Considerations

	Yes	No		Yes	No
Power Lines		x	Fences		x
Invasive/Sensitive Plants		x	Heritage Sites		x
Dump Sites		x	Meadows		x
Survey Monuments		x	Water Systems		x
Improvements		x	Other		x

Road and Landing Information

Landing	Road Type	Road Length	Road Status		Landing	Road Type	Road Length	Road Status
A	non-system	307 ft	Existing					
B	non-system	295 ft	Existing					
C	5842		Existing					
D	non-system	730 ft	Existing					
E	non-system	390 ft	Existing					
F	5842		Existing					
G	non-system	370 ft	Existing					
H	non-system	355 ft	Existing					
I	5842		Existing					

Notes

Temporary road to landings A and B is a native surface road with a maximum adverse haul of about 16 percent.

Temporary road to landings D and E has some aggregate and is 18 to 19 percent adverse haul. Truck assist will be needed.

Temporary road to landings G and H is native surface and is 15 to 19 percent adverse haul. Truck assist will be needed.

[illegible]

Unit Totals and Averages

Notes

Morris Thin Unit Summary Sheet

Central Coast Ranger District

General Information

Unit # : 2 **Stand # :** 507254
Legal Location: Sec. 17 and 18, T. 17 S., R. 11 W., W.M. **Acres:** 1977
Photo Number: 707-239 **Year of Origin:** 60
Unit Designation: DxP **Residual TPA Post Harvest:** Casey Hawes
Recon by/Date:

Volume Information

Source of volume estimate: Stand Exam **Estimated Volume:** 13.6 MBF/acre

Special Considerations

	Yes	No		Yes	No
Power Lines		x	Fences		x
Invasive/Sensitive Plants		x	Heritage Sites		x
Dump Sites		x	Meadows		x
Survey Monuments		x	Water Systems		x
Improvements		x	Other	x	

Road and Landing Information

Landing	Road Type	Road Length	Road Status		Landing	Road Type	Road Length	Road Status
A	5842		Existing					
B	5842		Existing					
C	5842		Existing					
C-1	5842		Existing					
D	5842		Existing					
E	non-system	295 ft	Existing					
F	5842		Existing					
G	5842		Existing					

Notes

Other- Some of the plantation trees have study tags.

Temporary road to landing E is 10 to 15 percent adverse haul.

[illegible]

Morris Thin Unit Summary Sheet

Central Coast Ranger District

General Information

Unit # : 3 **Stand # :** 507260
Legal Location: Sec. 20, T. 17 S., R. 11 W., W.M. **Acres:** 1977
Photo Number: 707-241 **Year of Origin:** 65
Unit Designation: DxP **Residual TPA Post Harvest:** Casey Hawes
Recon by/Date:

Volume Information

Source of volume estimate: Stand Exam **Estimated Volume:** 8.5 MBF/acre

Special Considerations

	Yes	No		Yes	No
Power Lines		x	Fences		x
Invasive/Sensitive Plants		x	Heritage Sites		x
Dump Sites		x	Meadows		x
Survey Monuments		x	Water Systems		x
Improvements		x	Other		x

Road and Landing Information

Landing	Road Type	Road Length	Road Status		Landing	Road Type	Road Length	Road Status
A	non-system	230 ft	Existing					
B	non-system	322 ft	Existing					
C	non-system	63 ft	Existing					
D	5842		Existing					
E	5842		Existing					
F	5842		Existing					

Notes

Temporary road to landing A is 18-19% adverse haul. Because of the short distance to the 5842 road I don't think an assist vehicle is necessary.

Temporary road to landings B and C is 18-19% adverse haul. This is a little bit longer road appraise for truck assist.

[illegible]

Morris Thin Unit Summary Sheet

Central Coast Ranger District

General Information

Unit # :	<u>4</u>	Stand # :	<u>507261</u>
Legal Location:	<u>Sec. 20 and 29, T. 17 S., R. 11 W., W.M.</u>	Acres:	
Photo Number:	<u>19-18 (1995)</u>	Year of Origin:	<u>1981</u>
Unit Designation:	<u>DxP</u>	Residual TPA Post Harvest:	<u>11.5</u>
Recon by/Date:	<u>Casey Hawes</u>		

Volume Information

Source of volume estimate:	<u>Stand Exam</u>	Estimated Volume:	<u>11.5 MBF/acre</u>
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Special Considerations

	Yes	No		Yes	No
Power Lines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Fences	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Invasive/Sensitive Plants	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Heritage Sites	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Dump Sites	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Meadows	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Survey Monuments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water Systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Improvements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Road and Landing Information

Landing	Road Type	Road Length	Road Status		Landing	Road Type	Road Length	Road Status
A	5842		Existing					
B	5842		Existing					
C	5842		Existing					
D	5842		Existing					
E	non-system	150 ft	New					
F	5842		Existing					
G	non-system	195 ft	New					

Notes

Southeast part of the stand was not pre-commercially thinned (PCT). This area is also heavy to Sitka spruce. Defer area where PCT was not completed.

The planned temporary road on the south end of the harvest unit was not suitable for haul. This road has favorable slopes approaching 30 percent. A new temporary road totaling 195 feet was designed to access landing G.

[illegible]

Morris Thin Unit Summary Sheet

Central Coast Ranger District

General Information

Unit # : 5 **Stand # :** 507262
Legal Location: Sec. 31, T. 17 S., R. 11 W., W.M. **Acres:** 1969
Photo Number: 18-182 (1995) **Year of Origin:** 1969
Unit Designation: DxP **Residual TPA Post Harvest:** 55
Recon by/Date: Casey Hawes

Volume Information

Source of volume estimate: Stand Exam **Estimated Volume:** 15MBF/acre

Special Considerations

	Yes	No		Yes	No
Power Lines		X	Fences		X
Invasive/Sensitive Plants		X	Heritage Sites		X
Dump Sites		X	Meadows		X
Survey Monuments		X	Water Systems		X
Improvements		X	Other		X

Road and Landing Information

Landing	Road Type	Road Length	Road Status		Landing	Road Type	Road Length	Road Status
A	non-system	125 ft	Existing					
B	non-system	85 ft	Existing					
C	5842		Existing					
D	5842		Existing					
E	5842		Existing					

Notes

Note- Private property line on north edge of the unit. Protect carsonite posts.

[illegible]

Morris Thin Unit Summary Sheet

Central Coast Ranger District

General Information

Unit # : 6 **Stand # :** 607235
Legal Location: Sec. 6, T. 18S., R. 11W., and Sec. 31, T. 17S., R. 11W., W.M. **Acres:**
Photo Number: 707-245 **Year of Origin:** 1974
Unit Designation: DxP **Residual TPA Post Harvest:** 50
Recon by/Date: Casey Hawes

Volume Information

Source of volume estimate: Stand Exam **Estimated Volume:** 12MBF/acre

Special Considerations

	Yes	No		Yes	No
Power Lines		x	Fences		x
Invasive/Sensitive Plants		x	Heritage Sites		x
Dump Sites		x	Meadows		x
Survey Monuments		x	Water Systems		x
Improvements		x	Other		x

Road and Landing Information

Landing	Road Type	Road Length	Road Status		Landing	Road Type	Road Length	Road Status
A	non-system	215 ft	Existing					
B	5842820		Existing					
C	5842820		Existing					
D	5842820		Existing					
E	non-system	75 ft	Existing					
F	non-system	520 ft	Existing					
G	5842820		Existing					
I	5842820		Existing					

Notes

Temporary road to landing E and F is 10-15% adverse haul.

[illegible]

Morris Thin Unit Summary Sheet

Central Coast Ranger District

General Information

Unit # : 7 **Stand # :** 607232
Legal Location: Sec. 31 and 32, T. 17 S., R. 11 W., W.M. **Acres:** 1969
Photo Number: 1507-65 **Year of Origin:** 1969
Unit Designation: DxP **Residual TPA Post Harvest:** 50
Recon by/Date: Casey Hawes

Volume Information

Source of volume estimate: Stand Exam **Estimated Volume:** 13 MBF/acre

Special Considerations

	Yes	No		Yes	No
Power Lines		x	Fences		x
Invasive/Sensitive Plants	x		Heritage Sites		x
Dump Sites		x	Meadows		x
Survey Monuments		x	Water Systems		x
Improvements		x	Other	x	

Road and Landing Information

Landing	Road Type	Road Length	Road Status		Landing	Road Type	Road Length	Road Status
A	5842784		Existing		K	non-system	174 ft	Existing
B	non-system	275 ft	Existing		L	non-system	178 ft	Existing
C	non-system	352 ft	Existing		M	non-system	115 ft	Existing
D	non-system	220 ft	Existing		N	non-system	865 ft	Existing
E	non-system	765 ft	Existing		O	non-system	362 ft	Existing
F	non-system	120 ft	Existing					
G	non-system	145 ft	New					
H	non-system	same as I	Existing					
I	non-system	385 ft	Existing					
J	non-system	824 ft	Existing					

Notes

Note Special Considerations-There is English Holly and an abandoned weather station present in this harvest unit.

There are five temporary roads in this unit.

The total length of the temporary road to landings C, D, and E is 1337 feet. See above for distance between landings. This road is native surface with a 10-15 percent adverse grade.

The total length of the temporary road to landings H, I, J, K, L, M, N, and O is 2903 feet. See above for distance between landings. This road is native surface with a 10-15 percent adverse grade.

Logging Systems Information							Unit # 7																	
Landing	Logging System Type	Guyline Anchor Trees	Multiple Guy Anchors	Special Anchors	Intermediate Supports	Tailtrees	Logging Profiles Run and Azimuth/Length																	
A	S	P	No	none	2 IS	3 TT, 30 ft	Yes	Az79, 497																
B	S	P	No	none	none	none	No																	
C	S	P	No	none	none	none	No																	
D	S	P	No	none	5 IS	1 TT, 20 ft	No																	
E	S	P	No	none	none	none	No																	
F	S	P	No	none	none	none	No																	
G	S	P	No	none	none	none	No																	
H	S	P	No	none	none	1 TT, 30 ft	No																	
I	S	P	No	none	none	none	No																	
J	S	P	No	none	none	2 TT, 30 ft	No																	
K	S	P	No	none	none	none	No																	
L	S	P	No	none	none	none	No																	
M	S	P	No	none	none	none	No																	
N	S	P	No	none	none	1 TT, 30 ft	No																	
O	S	P	No	none	none	2 TT, 30 ft	No																	
<p>Key: Logging System abbreviations are Skyline (S), Ground-Based (GB), Yoader (Y), Helicopter (H), or a combination of logging systems for each landing. Guyline anchor trees abbreviations are P for plantation, M for mature, and B for both. Special anchor abbreviations are Equipment (Eq), Deadmen (D), Earth (E), guyline (G) anchor, and tailhold (T). Abbreviations for intermediate supports (IS) and tailtree (TT).</p>																								
<p align="center">Unit Totals and Averages</p> <table border="0"> <tr> <td>Average Yarding Distance:</td> <td><u>370</u></td> <td>Average Net Pound per Payload:</td> <td><u>4000</u></td> </tr> <tr> <td>Average Mainline Tension:</td> <td><u>2500</u></td> <td>Average Slope:</td> <td><u>50</u></td> </tr> <tr> <td>Maximum Tagline Needed:</td> <td><u>none</u></td> <td>Total Number of Corridors:</td> <td><u>88</u></td> </tr> <tr> <td>Maximum Yarding Distance:</td> <td><u>1000</u></td> <td>Total Number of Landings:</td> <td><u>15</u></td> </tr> </table>									Average Yarding Distance:	<u>370</u>	Average Net Pound per Payload:	<u>4000</u>	Average Mainline Tension:	<u>2500</u>	Average Slope:	<u>50</u>	Maximum Tagline Needed:	<u>none</u>	Total Number of Corridors:	<u>88</u>	Maximum Yarding Distance:	<u>1000</u>	Total Number of Landings:	<u>15</u>
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Maximum Yarding Distance:	<u>1000</u>	Total Number of Landings:	<u>15</u>																					
<p align="center">Notes</p>																								

Morris Thin Unit Summary Sheet

Central Coast Ranger District

General Information

Unit # : 8 **Stand # :** 607233
Legal Location: Sec. 32 and 33, T. 17 S., R. 11 W., W.M. **Acres:** 1988
Photo Number: 1507-65 **Year of Origin:** 75
Unit Designation: DxP **Residual TPA Post Harvest:** Casey Hawes
Recon by/Date:

Volume Information

Source of volume estimate: Stand Exam **Estimated Volume:** 9.5 MBF/acre

Special Considerations

	Yes	No		Yes	No
Power Lines		x	Fences		x
Invasive/Sensitive Plants		x	Heritage Sites		x
Dump Sites		x	Meadows		x
Survey Monuments		x	Water Systems		x
Improvements		x	Other		x

Road and Landing Information

Landing	Road Type	Road Length	Road Status		Landing	Road Type	Road Length	Road Status
A	5842777		Existing					
B	5842777		Existing					
C	5842777		Existing					
D	5842777		Existing					
E	5842777		Existing					
F	5842777		Existing					
G	5842777		Existing					

Notes

Note- see engineering notes for the length and condition of Forest Service system road(s).

Patches of holes with low stocking dispersed throughout the unit.

[illegible]

Key: Logging System abbreviations are Skyline (S), Ground-Based (GB), Yoader (Y), Helicopter (H), or a combination of logging systems for each landing. Guyline anchor trees abbreviations are P for plantation, M for mature, and B for both. Special anchor abbreviations are Equipment (Eq), Deadmen (D), Earth (E), guyline (G) anchor, and tailhold (T). Abbreviations for intermediate supports (IS) and tailtree (TT).

Unit Totals and Averages

Average Yarding Distance:	<u>465</u>	Average Net Pound per Payload:	<u>3500</u>
Average Mainline Tension:	<u>3000</u>	Average Slope:	<u>45</u>
Maximum Tagline Needed:	<u>none</u>	Total Number of Corridors:	<u>37</u>
Maximum Yarding Distance:	<u>950</u>	Total Number of Landings:	<u>7</u>

Notes

Area behind landing C and D can be shovel logged to system road. There is access to ridge south/southeast of landing C to facilitate shovel yarding.

Guyline anchor behind landings E and F for the yarder are sparse. There about 4-6 trees spread behind these two landings. This should provide adequate guyline anchors for the limited number of corridors.

Note to Presale Crew-

Area yarded by Landing B. The unit boundary will need to be cut off at terrain point (TP) #15 (STA 7+04) along the profile run at Azimuth 250 degrees. Boundary can be placed about 50 feet below this terrain point.

Area yarded by Landing C. The boundary will need to be cut off at TP #17 (STA 7+04) along the profile run at Azimuth 242 degrees. There is a stream located at TP# 18. The timbered area below this stream shouldn't be included in the unit.

Morris Thin Unit Summary Sheet

Central Coast Ranger District

General Information

Unit # : 9 **Stand # :** 607236
Legal Location: Sec. 6, T. 18S., R. 11W., and Sec. 31, T. 17S., R. 11W., W.M. **Acres:**
Photo Number: 707-245 **Year of Origin:** 1972
Unit Designation: DxP **Residual TPA Post Harvest:** 55
Recon by/Date: Casey Hawes

Volume Information

Source of volume estimate: Stand Exam **Estimated Volume:** 13.5 MBF/acre

Special Considerations

	Yes	No		Yes	No
Power Lines		x	Fences		x
Invasive/Sensitive Plants		x	Heritage Sites		x
Dump Sites		x	Meadows		x
Survey Monuments		x	Water Systems		x
Improvements		x	Other		x

Road and Landing Information

Landing	Road Type	Road Length	Road Status		Landing	Road Type	Road Length	Road Status
A	5842		Existing					
B	5842		Existing					
C	5842		Existing					
D	5842		Existing					

Notes

[illegible]

[illegible]

Morris Thin Unit Summary Sheet

Central Coast Ranger District

General Information

Unit # : 11 Stand # : 607243
 Legal Location: Sec. 6, T. 18 S., R. 11 W., W.M. Acres: 1969
 Photo Number: 707-246 Year of Origin: 1969
 Unit Designation: DxP Residual TPA Post Harvest: 50
 Recon by/Date: Casey Hawes

Volume Information

Source of volume estimate: Stand Exam Estimated Volume: 11 MBF/acre

Special Considerations

	Yes	No		Yes	No
Power Lines		x	Fences		x
Invasive/Sensitive Plants	x		Heritage Sites		x
Dump Sites		x	Meadows		x
Survey Monuments		x	Water Systems		x
Improvements		x	Other		x

Road and Landing Information

Landing	Road Type	Road Length	Road Status		Landing	Road Type	Road Length	Road Status
A	non-system	80 ft	Existing					
B	5842822		Existing					
C	5842822		Existing					
D	5842		Existing					
E	5842822		Existing					
F	5842		Existing					
G	5842		Existing					

Notes

English Holly present in unit.

